



# K00095 RELAY/TRANSFORMER KIT FOR DUAL CIRCUIT CONDENSERS

## Installation Instructions

### CAUTION

**Disconnect power supply to ice machine and remote condenser before beginning installation to prevent electrical shock or equipment damage.**

#### A. Transformer Installation

1. Transformer is supplied for mounting to 4" square outlet box.
2. Mount outlet box(es) for transformer in convenient location as close to ice machine as possible. (Note: Do not install transformer to outlet box at this time.)

#### B. Relay Installation (Figure 1)

1. Remove remote condenser fan cover.
2. Remove electrical enclosure box between two fan support brackets.
3. Mount relay(s) to relay bracket with #6-32 screws and nuts.
4. Loosen fan support brackets enough to slide relay bracket between condenser housing and fan support bracket (Figure 1).
5. With relay bracket in place, tighten fan support brackets.

#### C. Wiring Connections (Figure 2, "G" Series; Figure 4, "B" Series)

The Relay/Transformer Kit is used for either 1 phase or 3 phase ice machines (this can be any combination, although most installations will have two ice machines of the same phase).

All wiring must comply with national and local codes.

##### 1. Wiring transformer to ice machine.

The multi-voltage transformer primary is rated for 120 VAC, 208 VAC, or 240 VAC.

- a. Wire transformer primary to match supply voltage at ice machine.
- b. Label on transformer identifies different voltage hookups. Be sure you are using correct leads on transformer for available power supply. **Secure wire nuts to the transformer wires not in use.** (Note: It is wired correctly if you read 24 VAC at transformer secondary with power supplied to transformer.)

##### 2. Wiring transformer low voltage (24 VAC) to relay coil (Figure 2, "G" Series, Figure 4, "B" Series).

- a. Low voltage wire is supplied by the installer.
- b. Step "C" is a safety precaution to prevent the low voltage circuit from being energized by high voltage.
- c. If low voltage wiring insulation is not rated for high voltage wiring, you must place PVC tube over the wire before crimping the 3/16" terminals to wires. (Note: The PVC tube is needed only in the condenser enclosure and may be cut off after exiting condenser.)

##### 3. Wiring relay contacts to fan motor.

- a. Condenser fan electrical supply is separate from ice machine electrical supply.
- b. Wire relay contacts in parallel to the condenser fan (refer to Figure 2, "G" Series; Figure 4, "B" Series). (Note: Disregard one of the jumper wires supplied.)
- c. A single ice machine may be installed to the DC remote condenser with the anticipation of installing the second machine at a later date. Refer to Figure 3 for relay wiring connections to fan motor.

#### D. Checkout Procedure

1. Turn on machine #1 and turn off machine #2. Fan motor must be running.
2. Turn off machine #1 and turn on machine #2. Fan motor must be running.
3. Turn off machine #1 and turn off machine #2. Fan motor must be off.

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